

REMARKS

Reconsideration of the above referenced application in view of the following remarks is requested. Claims 1 and 23 have been amended for a minor style change. Claims 1-8 were previously cancelled. Existing claims 8-30 remain in the application. Please note that the prosecuting attorney for this application has been changed.

ARGUMENT***Claim Rejections – 35 U.S.C. § 102***

Claims 23-28 (appears a typo here and should be 23-30) are rejected under 35 U.S.C. § 102(b) as being anticipated by Eickemeyer et al. (U.S. Patent No. 6,393,552 B1) (hereinafter Eickemeyer).

When rejecting independent claim 23, the Examiner asserted that the "sector mask" disclosed in Eickemeyer (fig. 3, ref. 335; col. 4, lines 53-57) is the same or equivalent to the "register type identifier value" recited in claim 23. Col. 4, lines 53-57 of Eickemeyer is quoted below:

The first column 331 in the Rename Table 313 contains the architected register number, the second column 333 contains the instruction address and the third column 335 contains architected register or rename register number plus the sector mask. There is one sector mask bit for each sector.

Applicants cannot find where in the above quoted portion of Eickemeyer discloses that the sector mask indicates the type of register stored on that location, as asserted by the Examiner in the Office Action. In fact, Applicants read the entire Eickemeyer reference and it does not expressly disclose what a sector mask is and what information it represents. When making the above assertion, the Examiner must have relied on some

knowledge outside Eickemeyer. Applicants respectfully request that the Examiner point out whatever knowledge the Examiner relied on in making this assertion so that a determination may be made regarding whether that knowledge source is common to a person having ordinary skill in the art. Without such a supplemental knowledge source outside Eickemeyer, Applicants must assume that the sector mask disclosed in Eickemeyer is not the same or equivalent to the register type identifier value recited in claim 23 and hence that the "register type identifier value" element in claim 23 is not taught by Eickemeyer.

Additionally, the Examiner asserted that AR1 as disclosed in Eickemeyer (see fig. 1; col. 3, lines 45-47) is a logical register. Applicants respectfully disagree. Eickemeyer expressly discloses that Architected Register File (ARF) 301 is a component of CPU (see col. 3, lines 43-47 of Eickemeyer) which indicates that ARF is a physical register file. That ARF is a physical register file can further be supported by col. 4, lines 14-20 of Eickemeyer as quoted below:

The renaming register pool, i.e. the group of registers available for renaming, consists of a number of 32-bit registers. These rename registers are used independently for each 32-bit register sector that needs to be renamed. This pool consists of A sectors 309 and B sectors 311 in the RRF 303, and A sectors 305 in the ARF 307.

The above quoted portion of Eickemeyer clearly shows that ARF is treated in the same way as the Rename Register File (RRF): both of them can be renamed. There is no doubt that RRF is a physical register. Thus, ARF is also a physical register. If the Examiner insists that ARF, particularly AR1, is a logical register, Applicants respectfully request that the Examiner provide clear evidence showing so.

Even if assuming that AR1 is a logical register for the purpose of arguments, nowhere in Eickemeyer is the mapping element (i.e., mapping AR1 to a physical register) taught. There is no mapping at all from ARF to RRF because they are used equally as shown by Figs. 4 and 5 and their corresponding description from col. 4, line 63 to col. 5, line 42 of Eickemeyer.

For the foregoing reasons, Eickemeyer does not teach logical registers and the mapping from a logical register to a physical register. Thus, Eickemeyer does not teach rename logic element recited in claim 23 that maps an instance of the logical register to a selected one of the physical rename register.

Because Eickemeyer does not teach, expressly or implicitly, at least the rename logic element and the register type identifier value element recited in claim 23, claim 23 is not anticipated by Eickemeyer. Accordingly, all of the claims that depend therefrom (i.e., claims 24-30) are not anticipated by Eickemeyer either. Applicants thus respectfully request that the 35 U.S.C. § 102(b) rejections over claims 23-30 be withdrawn.

Allowable Subject Matter

Claims 9-22 are allowed. Applicants accept the allowance of these claims and respectfully request that the Examiner reconsider claims 23-30 to allow all of the claims in the present application.

CONCLUSION

Based on the foregoing, it is submitted that all active claims are presently in condition for allowance, and their passage to issuance is respectfully solicited. If the Examiner has any questions, the Examiner is invited to contact the undersigned at (503) 264-1700. Entry of this amendment is respectfully requested.

Respectfully submitted,

Date: May 08, 2007

/Guojun Zhou/

Guojun Zhou
Registration No. 56,478
INTEL CORPORATION
MS JF3-147
2111 NE 25th Ave.
Hillsboro, OR. 97124